Application No.: 10/533,790 Docket No.: 0091-0245PUS1
Response filed September 2, 2008 Art Unit: 1797

Response filed September 2, 2008 Office Action dated July 30, 2008

Page 2 of 10

Office 7 terion dated July 50, 20

IN THE CLAIMS:

Applicants hereby elect Group I consisting of claims 10-17 for initial examination in this

application. This election is with traverse.

Please amended the claims as follows:

1.-9. (Cancelled)

10. (Currently Amended) A disposable cartridge for use in blood testing comprising:

(a) a housing including a generally flat top side and multiple depressions formed on

one surface of said housing said top side, each of said depressions defining a main portion of a

receptacle and connecting to at least one of channels disposed within said housing;

(b) a diaphragm sealing- sealingly attached to said top side of said housing, covering

said multiple depressions and forming multiple said receptacle; portions of said diaphragm over

said depressions being flexible; and

(c) a valve disposed within said housing among said channels adapted to interconnect

selected channels for directing flow between selected receptacles.

11. (Previously Presented) The disposable cartridge of claim 10, wherein one or more

of said depressions includes a sealed opening adapted to interface with a needle of a cell

counting device.

12. (Previously Presented) The disposable cartridge of claim 11, wherein at least one

of said receptacles contains a liquid diluting agent.

13. (Previously Presented) The disposable cartridge of claim 12, wherein one of said

receptacles contains a haemolysis agent.

Docket No.: 0091-0245PUS1 Application No.: 10/533,790 Art Unit: 1797

Response filed September 2, 2008

Office Action dated July 30, 2008 Page 3 of 10

14. (Previously Presented) The disposable cartridge of claim 10, wherein said valve is a slide valve and displacement of a valve slide of said slide valve interconnects selected channels

between selected receptacles.

The disposable cartridge of claim 14, wherein said slide 15. (Previously Presented)

valve comprises at least one channel in said valve slide in communication with a blood sampling

capillary tube, and displacement of said valve slide causes displacing a volume of a blood sample

within said channel of said valve slide into one of said receptacles.

16. (Previously Presented) The disposable cartridge of claim 10, wherein said housing

has integrated therein a light path for performing photometric measurement on material

contained in at least one of said receptacles.

17. (Previously Presented) The disposable cartridge of claim 10 further comprising an

additional depression sealed by said diaphragm forming an additional receptacle; said additional

depression having a sealed opening adapted to interface with a needle of a cell counting device;

and said additional receptacle containing a washing liquid for cleaning said cell counting device.

18. (Withdrawn Currently Amended) A method of preparing a blood sample for blood

measurement comprising:

providing a cartridge comprising a housing including a generally flat top side and

multiple depressions formed on one surface of said housing said top side and a diaphragm

sealing sealingly attached to said top side of said housing, covering said multiple depressions

and forming multiple receptacles, portions of said diaphragm over said depressions being

flexible; each of said depressions connecting to at least one of channels disposed within said

housing adapted to interconnect at least two of said receptacles; a first of said receptacles

containing a liquid diluting agent;

Application No.: 10/533,790 Docket No.: 0091-0245PUS1

Response filed September 2, 2008 Art Unit: 1797 Office Action dated July 30, 2008 Page 4 of 10

applying pressure on a flexible portion of said diaphragm over said first of said receptacles, causing said liquid diluting agent flowing into a second of said receptacles through one of said channels, thereby carrying a portion of a blood sample introduced in said one of said channels into said second of said receptacles;

applying pressure on a flexible portion of said diaphragm over said second of said receptacles, and causing a mixture of said blood sample and said liquid diluting agent flowing back to said first of said receptacles through said one of said channels; and

repeating applying pressure on said flexible portions of said diaphragm over said first and said second of said receptacles to cause said mixture flowing back and forth between said first and said second of said receptacles to achieve proper mixing of said blood sample with liquid diluting agent, thereby obtaining a diluted sample.

19. (Withdrawn) The method of claim 18, wherein said applying pressure is performed by pressing, applying a hydraulic or pneumatic pressure, or applying a vacuum over said first or said second of said receptacles.

20. (Withdrawn) The method of claim 19 further comprising:

introducing a portion of said diluted sample into a third of said receptacles through one or more of said channels, wherein said third of said receptacles also contains said liquid diluting agent;

applying pressure on a flexible portion of said diaphragm over said third of said receptacles, and causing a further mixture of said diluted sample and said liquid diluting agent flowing into a fourth of said receptacles through one or more of said channels;

applying pressure on a flexible portion of said diaphragm over said fourth of said receptacles, and causing said further mixture flowing back to said third of said receptacles through said one or more of said channels; and

repeating applying pressure on said flexible portions of said diaphragm over said third and said fourth of said receptacles to cause said further mixture flowing back and forth between Application No.: 10/533,790 Docket No.: 0091-0245PUS1
Response filed September 2, 2008 Art Unit: 1797

Office Action dated July 30, 2008

Art Unit: 1797
Page 5 of 10

said third and said fourth of said receptacles to achieve proper mixing of said diluted sample and said liquid diluting agent, thereby obtaining a further diluted sample.

21. (Withdrawn) The method of claim 20 further comprising:

delivering said further diluted sample to a cell counting device for red blood cell testing, through a needle connected to said cell counting device through a conduit, said needle being inserted into a sealed opening located in said third of said receptacles.

22. (Withdrawn) The method of claim 21, wherein said cartridge further comprises an additional depression sealed by said diaphragm forming an additional receptacle, said additional receptacle containing a washing liquid; and wherein said method further comprises withdrawing said washing liquid from said additional receptacle to said cell counting device for cleaning and causing said washing liquid entering one of said receptacles through said conduit, thereby returning said further diluted sample back to said cartridge after said testing.

23. (Withdrawn) The method of claim 18 further comprising:

introducing another portion of said diluted sample into a fifth of said receptacles through one of said channels, wherein said fifth of said receptacles contains a haemolysis agent;

applying pressure on a flexible portion of said diaphragm over said fifth of said receptacles, and causing a mixture of said diluted sample and said haemolysis agent flowing into one of the other receptacles through one or more of said channels;

applying pressure on a flexible portion of said diaphragm over said one of the other receptacles, and causing said mixture of said diluted sample and said haemolysis agent flowing back to said fifth of said receptacles through said one or more of said channels; and

repeating applying pressure on said flexible portions of said diaphragm over said fifth and said one of the other receptacles to cause said mixture of said diluted sample and said haemolysis agent flowing back and forth between said fifth and said one of the other receptacles to achieve proper mixing of said diluted sample with said haemolysis agent.

Application No.: 10/533,790 Response filed September 2, 2008

Office Action dated July 30, 2008

Docket No.: 0091-0245PUS1

Art Unit: 1797

Page 6 of 10

24. (Withdrawn) The method of claim 23 further comprising:

delivering said mixture of said diluted sample and said haemolysis agent to a cell

counting device for white blood cell testing, through a needle connected to said cell counting

device through a conduit, said needle being inserted into a sealed opening located in said fifth of

said receptacles.

25. (Withdrawn) The method of claim 24 further comprising:

performing a photometric measurement on said mixture of said diluted sample and said

haemolysis agent in said fifth of said receptacles using a light path integrated in said fifth of said

receptacles.

26. (Withdrawn) The method of claim 25, wherein said cartridge further comprises

an additional depression sealed by said diaphragm forming an additional receptacle, said

additional receptacle containing a washing liquid; and wherein said method further comprises

withdrawing said washing liquid from said additional receptacle to said cell counting device for

cleaning and causing said washing liquid entering one of said receptacles through said conduit,

thereby returning said mixture of said diluted sample and said haemolysis agent back to said

cartridge after said testing.

27. (Withdrawn) The method of claim 18, wherein said portion of a blood sample is

introduced by a valve interconnecting said channels.